

Department of Environmental Quality Division of Air Quality

Michael O. Leavitt Governor

Dianne R. Nielson, Ph.D. Executive Director

Richard W. Sprott Director 150 North 1950 West P.O. Box 144820 Salt Lake City, Utah 84114-4820 (801) 536-4099 Fax (801) 536-4414 T.D.D. www.deq.utah.gov

## **Title V Operating Permit**

PERMIT NUMBER: 2700005001 DATE OF PERMIT: October 2, 2002 Date of Last Revision: October 2, 2002

This Operating Permit is issued to, and applies to the following:

### Name of Permittee: Permitted Location:

Graymont Western US Incorporated 3950 S 700 E, Suite 301 Salt Lake City, UT 84107

Cricket Mountain Plant PO Box 669 Delta, UT 84624

UTM coordinates: 4,311,010 meters Northing, 343,100 meters Easting

SIC code: 1422

## **ABSTRACT**

Graymont Western US Inc. operates the Cricket Mountain Lime Plant in Millard County, Utah. This plant has been in operation since 1980. The Cricket Mountain Lime Plant consists of quarries and a lime processing plant, including mining activities, limestone processing, four rotary lime kilns, post-kiln lime handling, and truck & rail loadout facilities. The rotary kilns are used to convert crushed limestone ore into quicklime. The products produced for resale are lime, limestone and kiln dust. The major source of air emissions are from mining and material handling and the combustion of fuels for the kiln operation. The Cricket Mountain Lime Plant is a major source for emissions of TSP, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO, and is subject to NSPS Subparts A, Y, Kb, HH & OOO.

Prepared By:

By:

	1	,
Richard W. Sprott, Executive Secretary Pau	ul J. Sile	er

# **Operating Permit History**

# **Table of Contents**

SECTIO	N I: GENERAL PROVISIONS	1
I.A.	FEDERAL ENFORCEMENT.	1
I.B.	PERMITTED ACTIVITY(IES)	1
I.C.	DUTY TO COMPLY.	1
I.D.	PERMIT EXPIRATION AND RENEWAL.	2
I.E.	APPLICATION SHIELD.	2
I.F.	SEVERABILITY	
I.G.	PERMIT FEE.	
I.H.	NO PROPERTY RIGHTS.	
I.I.	REVISION EXCEPTION.	
I.J.	INSPECTION AND ENTRY.	
I.K.	CERTIFICATION	
I.L.	COMPLIANCE CERTIFICATION.	
I.M.	PERMIT SHIELD.	
I.N.	EMERGENCY PROVISION.	
I.O.	OPERATIONAL FLEXIBILITY.	
I.P.	OFF-PERMIT CHANGES.  ADMINISTRATIVE PERMIT AMENDMENTS.	
I.Q.		
I.R.	PERMIT MODIFICATIONS.	
I.S.	RECORDS AND REPORTING.	
I.T.	REOPENING FOR CAUSE.	
I.U.	INVENTORY REQUIREMENTS.	
	N II: SPECIAL PROVISIONS	
II.A.		
II.B.	REQUIREMENTS AND LIMITATIONS.	
	1 Conditions on permitted source (Source-wide)	
II.B.	2 Conditions on Observation Point A: Lime Kiln #1 ( A: K-1)	14
	4 Conditions on Lime Kiln #3 ( K-3)	
	5 Conditions on Lime Kiln #4 ( K-4)	
	6 Conditions on Lime Kilns #1 through #4 ( K-1-4)	
	7 Conditions on Observation Point A: NSPS Subpart OOO Baghouses (A:NSPS-OOO)	
	8 Conditions on Observation Point A: Non-Subpart OOO Baghouses (A: NON-NSPS-OOO)	
	9 Conditions on Observation Point A: Limestone Screens (A: SCREENS)	
	10 Conditions on Observation Point A: Silo & Storage Bin Vents (A: BINS)	
II.B.	.11 Conditions on Observation Point A: Conveyor Transfer Points (A: TRANSFER POINTS)	41
	.12 Conditions on Observation Point A: Drop Points (A: DROP POINTS)	
	.13 Conditions on Direct Fire Heating System ( LS-GRIND)	
	14 Conditions on Observation Point B: Conveyor Transfer Points (B: TRANSFER POINTS)	
	.15 Conditions on Observation Point B: Drop Points (B: DROP POINTS)	
	16 Conditions on Observation Point C: NSPS Subpart OOO Baghouses ( C: NSPS-OOO)	
	.17 Conditions on Observation Point C: Non-Subpart OOO Baghouses (C: NON-NSPS-OOO)	
	.18 <u>Conditions on Observation Point C: Silo &amp; Storage Bin Vents ( C: BINS)</u>	
	20 Conditions on Observation Point C: Conveyor Transfer Points ( C: TRANSFER POINTS)	
	.21 Conditions on Observation Point D: NSPS Subpart OOO Baghouses ( D: NSPS-OOO)	
	.22 Conditions on Observation Point D: Limestone Screens (D: SCREENS)	
	23 Conditions on Observation Point D: Conveyor Transfer Points (D: TRANSFER POINTS)	
	24 Conditions on Observation Point D: Limestone Crushers (D: CRUSHERS)	
	.25 Conditions on Observation Point D: Drop Points (D: DROP POINTS)	
	26 Conditions on Abrasive Blasting (AB)	

II.B	3.27 Conditions on NSPS Fuel Storage Tanks ( NSPS-Tanks)	59
II.B	3.28 Conditions on Haul Roads (HR)	59
II.C.	EMISSIONS TRADING.	60
II.D.	ALTERNATIVE OPERATING SCENARIOS.	60
SECTIO	ON III: PERMIT SHIELD	61
SECTIO	ON IV: ACID RAIN PROVISIONS.	61

Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

### **Section I: General Provisions**

#### I.A. Federal Enforcement.

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

#### I.B. Permitted Activity(ies).

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

### I.C. **Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay

any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

### I.D. Permit Expiration and Renewal.

- I.D.1 This permit is issued for a fixed term of five years and expires on October 2, 2007. (R307-415-6a(2))
- I.D.2 Application for renewal of this permit is due by April 2, 2007. An application may be submitted early for any reason. (R307-415-5a(1)(c))
- I.D.3 An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))
- I.D.4 Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

### I.E. Application Shield.

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

#### I.F. Severability.

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

#### I.G. Permit Fee.

- I.G.1 The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))
- I.G.2 The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

### I.H. No Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

### I.I. Revision Exception.

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

### I.J. Inspection and Entry.

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))

#### I.K. Certification.

Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)

### I.L. Compliance Certification.

- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **August 31, 2003** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification:
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period, and whether such methods or other means provide continuous or intermittent data. Such

methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;

I.L.1.c

The status of compliance with the terms and conditions of the permit for the period covered by the certification, based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

- I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.
- I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF)
EPA, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2466

#### I.M. **Permit Shield.**

- I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:
- I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))
- I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))
- I.M.2 Nothing in this permit shall alter or affect any of the following:
- I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))
- I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b)
- I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

### I.N. Emergency Provision.

- I.N.1 An "emergency" is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))
- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))

#### I.O. **Operational Flexibility.**

Operational flexibility is governed by R307-415-7d(1).

### I.P. Off-permit Changes.

Off-permit changes are governed by R307-415-7d(2).

### I.Q. Administrative Permit Amendments.

Administrative permit amendments are governed by R307-415-7e.

### I.R. **Permit Modifications.**

Permit modifications are governed by R307-415-7f.

### I.S. Records and Reporting.

LS.1	Records.
1 \ 1	Records

- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii)
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.

### I.S.2 Reports.

- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i)
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification** within 14 days. Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))

### I.S.3 Notification Addresses.

I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality P.O. Box 144820 Salt Lake City, UT 84114-4820 Phone: 801-536-4000

1 none. 001 220 100

I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

### For annual compliance certifications

Environmental Protection Agency, Region VIII Office of Enforcement, Compliance and Environmental Justice (mail code 8ENF) 999 18th Street, Suite 300 Denver, CO 80202-2466 For reports, notifications, or other correspondence related to permit modifications, applications, etc. Environmental Protection Agency, Region VIII Office of Partnerships & Regulatory Assistance Air & Radiation Program (mail code 8P-AR) 999 18th Street, Suite 300 Denver, CO 80202-2466

Phone: 303-312-6440

### I.T. Reopening for Cause.

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:
- I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))
- I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))
- I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))
- I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

- I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))
- I.U. Inventory Requirements.
- I.U.1 An emission inventory shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)
- I.U.2 A Hazardous Air Pollutant Inventory shall be submitted in accordance with the procedures of R307-155, Hazardous Air Pollutant Inventory. (R307-155)

### **Section II: SPECIAL PROVISIONS**

### II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.

(R307-415-4(3)(a) and R307-415-4(4))

II.A.1 **Observation Point A: Lime Kiln #1** (designated as A: K-1)

Unit Description: Rotary lime kiln and preheater exhaust stack, with emissions controlled by a wet scrubber (W-80). Uses coal as primary fuel.

II.A.2 Lime Kiln #2 (designated as K-2)

Unit Description: Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-275). Uses coal as primary fuel.

II.A.3 Lime Kiln #3 (designated as K-3)

Unit Description: Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-375). Uses coal as primary fuel.

II.A.4 **Lime Kiln #4** (designated as K-4)

Unit Description: Rotary lime kiln and preheater exhaust stack, with emissions controlled by a baghouse (D-475). Uses coal as primary fuel.

II.A.5 Lime Kilns #1 through #4 (designated as K-1-4)

Unit Description: Combination of 4 rotary lime kilns listed above.

II.A.6 **Observation Point A: NSPS Subpart OOO Baghouses** (designated as A:NSPS-OOO)

Unit Description: Baghouse exhaust stacks:

D-7122 (mill, heater, material separator),

D-7133 (screen, 3 bucket elevators, 3 silo inlets),

D-7141 (truck & rail loadouts),

D-310 (kiln #3 screen),

D-414 (kiln #4 screen) &

D-403 (C-408 & C-409 to reclaim pile).

II.A.7 **Observation Point A: Non-Subpart OOO Baghouses** (designated as A: NON-NSPS-OOO)

Unit Description: Baghouse exhaust stacks:

D-10 (kilns #1 & #2 screens),

D-331 (loadout area),

D-479 (dolo system),

D-330 (kilns #2 & #3 lime handling).

II.A.8 **Observation Point A: Limestone Screens** (designated as A: SCREENS)

Unit Description: Screens: S-10 (Kilns #1 & #2 scalp screen),

S-310 (Kiln #3 scalp screen) &

S-411 (Kiln #4 scalp screen).

II.A.9 **Observation Point A: Silo & Storage Bin Vents** (designated as A: BINS)

Unit Description: Bin vents:

D-380 (Kiln #3 cyclone),

D-83 (lime kiln dust silo),

D-341 (lime silo),

D-465 (rail loadout),

D-91 (Kiln #1 coal silo),

D-94 (Kiln #2 coal silo) &

D-391 (Kiln #3 coal silo).

II.A.10 **Observation Point A: Conveyor Transfer Points** (designated as A: TRANSFER POINTS)

Unit Description: Material transfer to and from conveyor belts, observable from Observation Point A.

II.A.11 **Observation Point A: Drop Points** (designated as A: DROP POINTS) Unit Description: Material drop points: stacker belts (C-309, C-9, C-409, C-311, C-11 & C-412), silo loadout (U-465, K3 rail loadout, truck loadout, K1, K2, K3 kiln dust silo loadout & K1, K2, K3 core bin loadout) and drop to bunkers from D-10, D-310, C-465 & PH-20. II.A.12 **Direct Fire Heating System** (designated as LS-GRIND) Unit Description: Heating system within the limestone grinding plant. **Observation Point B: Conveyor Transfer Points** (designated as B: TRANSFER POINTS) II.A.13 Unit Description: Material transfer to and from conveyor belts, observable from Observation Point B. II.A.14 **Observation Point B: Drop Points** (designated as B: DROP POINTS) Unit Description: Material drop points to hoppers. Observation Point C: NSPS Subpart OOO Baghouses (designated as C: NSPS-OOO) II.A.15 Unit Description: Baghouse exhaust stack: D-415 (stone transfer to Kiln #4 preheater). **Observation Point C: Non-Subpart OOO Baghouses** (designated as C: NON-NSPS-OOO) II.A.16 Unit Description: Baghouse exhaust stacks: D-447 (Kiln #4 screen house), D-463 (lime blending system). **Observation Point C: Silo & Storage Bin Vents** (designated as C: BINS) II.A.17 Unit Description: Bin vent D-486 (Kiln #4 lime kiln dust silo) and coal silo vent D-491 (kiln #4 coal silo). II.A.18 **Observation Point C: Conveyor Transfer Points** (designated as C: TRANSFER POINTS) Unit Description: Material transfer to and from conveyor belts, observable from Observation Point C. II.A.19 **Observation Point C: Drop Points** (designated as C: DROP POINTS) Unit Description: Drop to: lime kiln dust pugging T-486, lime kiln dust loadout (T-486), dolomitic lime recycle hopper (N-470), PH-421 to bunker & N-432 (Kiln #4 core bin) loadout. II.A.20 Observation Point D: NSPS Subpart OOO Baghouses (designated as D: NSPS-OOO) Unit Description: Baghouse exhaust stack: D-1 (quarry crusher and screen). II.A.21 **Observation Point D: Limestone Screens** (designated as D: SCREENS) Unit Description: Screens: S-1 (primary screen) and S-041 (secondary screen). II.A.22 **Observation Point D: Conveyor Transfer Points** (designated as D: TRANSFER POINTS) Unit Description: Material transfer to and from conveyor belts, observable from Observation Point D. II.A.23 **Observation Point D: Limestone Crushers** (designated as D: CRUSHERS) Unit Description: Crushers: R-1 (primary crusher) and R-041 (secondary crusher). II.A.24 **Observation Point D: Drop Points** (designated as D: DROP POINTS) Unit Description: Material drop points: stacker belts (C-3, C-304, C-4 & sugarstone stacker) & loadout operations (C-305, C-5 & C-45). II.A.25 **Limestone Quarries** (designated as LQ) Unit Description: All mining activities, including drilling & blasting, not otherwise specified. No unit-specific applicable requirements. II.A.26 Miscellaneous Emissions (designated as MISC) Unit Description: Emission sources with no unit-specific requirements such as painting, laboratory, acetylene combustion, parts cleaners and comfort heaters. No unit-specific

applicable requirements.

### II.A.27 **Abrasive Blasting** (designated as AB)

Unit Description: Equipment used for abrasive blasting.

### II.A.28 Non-NSPS Fuel Storage Tanks (designated as NONNSPS-TANKS)

Unit Description: Four 10,150 gallon diesel tanks and one 2,000 gallon gasoline tank. No unit-specific applicable requirements.

### II.A.29 NSPS Fuel Storage Tanks (designated as NSPS-Tanks)

Unit Description: One 12,000 gallon diesel tank.

### II.A.30 **Haul Roads** (designated as HR)

Unit Description: Truck haul roads from paved highway to plant and from plant to quarry, controlled by water spray and chemical dust suppression.

### II.B. Requirements and limitations.

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

#### II.B.1 Conditions on permitted source (Source-wide)

#### II.B.1.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity unless otherwise specified in this permit (note that this condition does apply to fugitive emissions but does not apply to fugitive dust). [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.1.a.1 Monitoring:

Unless otherwise specified, a visual opacity survey of each affected emission unit shall be performed on a monthly basis while the unit is operating. Permittee is not required to perform monthly surveys on natural gas combustion sources and petroleum storage tanks. The visual opacity survey shall be performed by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. If visible emissions other than condensed water vapor are observed from an emission unit, an opacity determination of that emission unit shall be performed by a certified observer within 24 hours of the initial survey. The opacity determination shall be performed in accordance with 40 CFR 60, Appendix A, Method 9.

#### II.B.1.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

### II.B.1.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.b Condition:

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any permitted plant equipment, including associated air pollution control equipment, in a manner consistent with good air pollution

control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-5 and 40 CFR 60.11(d); condition originated in DAQE-140-02]

### II.B.1.b.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

### II.B.1.b.2 **Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.1.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.c Condition:

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

### II.B.1.c.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

#### II.B.1.c.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

#### II.B.1.c.3 **Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

### II.B.1.d **Condition:**

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

### II.B.1.d.1 **Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

### II.B.1.d.2 **Recordkeeping:**

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

### II.B.1.d.3 **Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

#### II.B.1.e Condition:

Sulfur content of any fuel burned shall be no greater than 1.0 pounds sulfur per MMBtu heat input for any mixture of coal or 0.85 lbs sulfur per MMBtu heat input for any fuel oil. [Authority granted under R307-203-1; condition originated in DAQE-140-02]

### II.B.1.e.1 **Monitoring:**

The sulfur content shall be determined by the source or the fuel supplier using ASTM Method D-3177-75, D-3174-93, D-3176-89, D-4239-94 or D-55016-95 for coal and ASTM Method D-3175-75 for fuel oil, or an approved equivalent ASTM method.

If certification is provided by the fuel supplier, the sulfur content shall be tested quarterly from a composite sample or the supplier may provide certification for every fuel delivery.

If the source provides certification for coal sulfur content, a composite sample shall be tested quarterly from a composite of grab samples taken every 24 hours of operation. If the source provides certification for fuel oil sulfur content, a composite sample shall be tested quarterly.

### II.B.1.e.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.1.e.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.1.f **Condition:**

Fugitive dust at all operational and mining operations shall be minimized. Fugitive dust control measures to be used may include: periodic watering, chemical stabilization, paving, removal of spillage, surface compaction, speed restriction, revegetating, restricting travel, stabilizing loaded material, minimizing disturbed areas, drill dust controls, restricting areas to be blasted at one time, restricting fugitive dust at transfer points and storage piles by applying water, enclosing/covering or stabilizing. [Authority granted under R307-205; condition originated in DAQE-140-02]

### II.B.1.f.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

### II.B.1.f.2 **Recordkeeping:**

Records of all methods used and details pertaining to those methods (i.e. amount and type of chemical used for stabilization) used to control fugitive dust shall be maintained.

### II.B.1.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2 Conditions on Observation Point A: Lime Kiln #1 (A: K-1)

### II.B.2.a **Condition:**

Visible emissions shall be no greater than 15 percent opacity from the scrubber exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.2.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.2.a.2 **Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is performed, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2.b Condition:

Emissions of TSP shall be no greater than 19.75 lbs/hour and no greater than 0.072 grain/dscf from the scrubber exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.2.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.90 dscm (31.8 dscf). The minimum sample time for each run shall be 60 minutes.
- (3) Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

### II.B.2.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

### II.B.2.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2.c Condition:

Emissions of  $PM_{10}$  shall be no greater than 15.9 lbs/hour and no greater than 0.058 grain/dscf from the scrubber exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.2.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

II.B.2.c.2

### II.B.2.c.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2.d Condition:

Emissions of SO<sub>2</sub> shall be no greater than 22.4 lbs/hour from the scrubber exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.2.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

### II.B.2.d.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.e Condition:

Scrubber pressure loss of the gas stream shall be no more than 30 percent below that recorded during the most recent performance test. [Authority granted under 40 CFR 60 (Subpart HH); condition originated in 40 CFR 60, Subpart HH]

### II.B.2.e.1 **Monitoring:**

The permittee shall install, calibrate, maintain, operate and record the resultant information from a monitoring device for the continuous measurement of the pressure loss of the gas stream through the scrubber. Continuous shall be defined as, at least, one complete monitoring cycle for each successive fifteen-minute period. A complete cycle includes sampling, analyzing and data recording. The monitoring device must be accurate to within plus or minus 250 pascals (one-inch of water) and must be calibrated in accordance with the manufacturers instructions.

This data shall be reduced to a 1-hour average and reviewed, for compliance, on a weekly basis. Any 1-hour period in which the scrubber pressure drop is greater than 30 percent below that established during the most recent performance test shall be reported as excess emissions

### II.B.2.e.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.2.e.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A. (origin: 40 CFR 60 Subpart A)

#### II.B.2.f Condition:

ID fan motor rate shall be no greater than 1,750 rpm. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.2.f.1 **Monitoring:**

Fan tachometer reading is to be observed and logged once per day

### II.B.2.f.2 **Recordkeeping:**

An operators log shall be maintained which shall include the results of the monitoring required. All records shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.2.f.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.2.g Condition:

Emissions of TSP shall be no greater than 0.60 lbs/ton stone feed. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart HH); condition originated in DAQE-140-02]

### II.B.2.g.1 Monitoring:

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested once every 8,000 hours of operation or once every 3 calendar years from issuance of this permit, whichever comes first. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 shall be used to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.90 dscm (31.8 dscf). The minimum sample time for each run shall be 60 minutes.
- (3) Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

For the purpose of conducting a performance test, the permitee shall install, calibrate, maintain and operate a device for measuring the mass rate of stone feed to the kiln. The measuring device used must be accurate to within, plus or minus, 5 percent of the mass rate over its operating range.

### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit. Additionally, hours of operations shall be logged daily. The hours shall be summed and reviewed monthly.

II.B.2.g.2

### II.B.2.g.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.2.h Condition:

Scrubbing liquid supply pressure of the scubber shall be no more than 30 percent below that recorded during the most recent performance test. [Authority granted under 40 CFR 60 (Subpart HH); condition originated in 40 CFR 60, Subpart HH]

### II.B.2.h.1 **Monitoring:**

The permittee shall install, calibrate, maintain, operate and record the resultant information from a monitoring device for the continuous measurement of the liquid supply pressure to the scrubber. Continuous shall be defined as, at least, one complete monitoring cycle for each successive fifteen-minute period. A complete cycle includes sampling, analyzing and data recording. The monitoring device must be accurate to within plus or minus 5 percent of the design scrubbing liquid supply pressure and must be calibrated in accordance with the manufacturers instructions.

This data shall be reduced to a 1-hour average and reviewed, for compliance, on a weekly basis. Any 1-hour period in which the scrubbing liquid supply pressure is greater than 30 percent below that established during the most recent performance test shall be reported as excess emissions.

### II.B.2.h.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.2.h.3 **Reporting:**

The permittee shall comply with the reporting requirements in Section I of this permit and any additional reporting and notification requirements of 40 CFR 60 Subpart A. (origin: 40 CFR 60 Subpart A)

### II.B.3 Conditions on Lime Kiln #2 ( K-2)

### II.B.3.a **Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60.342(a)(2); condition originated in DAQE-140-02]

#### II.B.3.a.1 **Monitoring:**

The permitee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gasses discharged into the atmosphere. The span of the system shall be set at a minimum of 40 percent opacity. The output shall be reviewed at least monthly for compliance with the limit.

### II.B.3.a.2 **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

### II.B.3.a.3 **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

#### II.B.3.b **Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.3.b.1 **Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

### II.B.3.b.2 **Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service.

### II.B.3.b.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrances of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

#### II.B.3.c Condition:

Emissions of TSP shall be no greater than 8.23 lbs/hour and no greater than 0.020 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart HH); condition originated in DAQE-140-02 & 40 CFR 60, Subpart HH]

#### II.B.3.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. Tests may also be required at the direction of the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 shall be used at negative-pressure fabric filters and method 5D shall be used at positive pressure fabric filters to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.90 dscm (31.8 dscf). The minimum sample time for each run shall be 60 minutes.
- (3) Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

### II.B.3.c.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### II.B.3.c.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.3.d **Condition:**

Emissions of  $PM_{10}$  shall be no greater than 6.58 lbs/hour and no greater than 0.016 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.3.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

(a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.

(b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.3.e Condition:

II.B.3.d.2

II.B.3.d.3

Emissions of SO<sub>2</sub> shall be no greater than 22.4 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.3.e.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

### II.B.3.e.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### II.B.3.e.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.3.f Condition:

Emissions of NO<sub>x</sub> shall be no greater than 120.0 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.3.f.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

#### Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.3.f.2

II.B.3.f.3

### II.B.4 Conditions on Lime Kiln #3 ( K-3)

#### II.B.4.a **Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60.342(a)(2); condition originated in DAQE-140-02]

### II.B.4.a.1 **Monitoring:**

The permitee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gasses discharged into the atmosphere. The span of the system shall be set at a minimum of 40 percent opacity. The output shall be reviewed at least monthly for compliance with the limit.

### II.B.4.a.2 **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

### II.B.4.a.3 **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

### II.B.4.b Condition:

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.4.b.1 **Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

#### II.B.4.b.2 **Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service.

#### II.B.4.b.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrances of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

### II.B.4.c **Condition:**

Emissions of TSP shall be no greater than 9.43 lbs/hour and no greater than 0.020 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart HH); condition originated in DAQE-140-02 & 40 CFR 60, Subpart HH]

### II.B.4.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 shall be used at negative-pressure fabric filters and method 5D shall be used at positive pressure fabric filters to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.90 dscm (31.8 dscf). The minimum sample time for each run shall be 60 minutes.
- (3) Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### Reporting:

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.4.c.2

II.B.4.c.3

#### **Condition:** II.B.4.d

Emissions of PM<sub>10</sub> shall be no greater than 7.54 lbs/hour and no greater than 0.016 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.4.d.1

### **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered PM<sub>10</sub>.
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### II.B.4.d.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### II.B.4.d.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.4.e **Condition:**

Emissions of SO<sub>2</sub> shall be no greater than 27.2 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.4.e.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### Recordkeeping:

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

**Issued October 2, 2002** 

II.B.4.e.2

### II.B.4.e.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.4.f **Condition:**

Emissions of  $NO_x$  shall be no greater than 160.0 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.4.f.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### II.B.4.f.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.5 Conditions on Lime Kiln #4 ( K-4)

### II.B.5.a **Condition:**

Visible emissions shall be no greater than 15 percent opacity from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60.342(a)(2); condition originated in DAQE-140-02]

### II.B.5.a.1 **Monitoring:**

The permitee shall install, calibrate, maintain and operate a continuous monitoring system to monitor and record the opacity of a representative portion of the gasses discharged into the atmosphere. The span of the system shall be set at a minimum of 40 percent opacity. The output shall be reviewed at least monthly for compliance with the limit.

### II.B.5.a.2 **Recordkeeping:**

A log of the continuous opacity monitor data shall be maintained as required in R307-170 and as described in Provision I.S.1 of this permit.

### II.B.5.a.3 **Reporting:**

Reports shall be submitted quarterly, as outlined in R307-170, Continuous Emission Monitoring Program. These quarterly reports are considered prompt notifications of deviation, as required in Provision I.S.2.c of this permit, provided all information required by Provision I.S.2.c is included in the report. For the purpose of reporting required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity of the visible emissions from the lime kiln is greater than 15 percent opacity.

### II.B.5.b **Condition:**

During startup procedures the fabric filter control device shall be allowed to be bypassed while burning start-up fuels (propane, diesel). Baghouse bypassing is allowed for 7 hours after coal firing is commenced. If bypassing occurs for more than 7 hours after coal firing is commenced, a breakdown shall be reported per R307-107-2, UAC. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.5.b.1 **Monitoring:**

During startup procedures, the permittee shall monitor the time it takes to put the fabric filter control device into service.

### II.B.5.b.2 **Recordkeeping:**

For each occurrence in which the control device is not in service within 7 hours of commencement of coal firing, the permittee shall make a record in a log of the occurrence, calculate and record the excess emissions and record the justification for failure to have the control device in service.

### II.B.5.b.3 **Reporting:**

In addition to the reporting requirements in Section I of this permit, the permittee shall submit an annual report of the occurrances of excess emissions and justifications by January 31, of the following year. Additionally, the excess emissions shall be included in the annual emissions inventory.

#### II.B.5.c Condition:

Emissions of TSP shall be no greater than 17.14 lbs/hour and no greater than 0.020 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 (Subpart HH); condition originated in DAQE-140-02 & 40 CFR 60, Subpart HH]

### II.B.5.c.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 shall be used at negative-pressure fabric filters and method 5D shall be used at positive pressure fabric filters to determine the particulate matter concentration. The minimum sample volume for each run shall be 0.90 dscm (31.8 dscf). The minimum sample time for each run shall be 60 minutes.
- (3) Calculations To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (d) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

#### **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.5.c.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.5.d **Condition:**

Emissions of  $PM_{10}$  shall be no greater than 13.7 lbs/hour and no greater than 0.016 grain/dscf from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.5.d.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) For stacks in which no liquid drops are present, the following methods shall be used: 40 CFR 51, Appendix M, Methods 201 or 201a. Method 202 may be used to measure condensible particulate matter.
- (3) For stacks in which liquid drops are present, methods to eliminate the liquid drops should be explored. If no reasonable method to eliminate the drops exists, then the following methods shall be used: 40 CFR 60, Appendix A, Method 5, 5a, 5d, or 5e as appropriate. The back half condensibles shall also be tested using a method specified by the Executive Secretary. All particulate captured shall be considered  $PM_{10}$ .
- (4) The back half condensibles shall not be used for compliance demonstration but shall be used for inventory purposes.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

# II.B.5.d.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.5.d.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.5.e Condition:

Emissions of SO<sub>2</sub> shall be no greater than 38.4 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.5.e.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 6, 6A, 6B, or 6C shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

# II.B.5.e.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.5.e.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.5.f Condition:

Emissions of  $NO_x$  shall be no greater than 200.0 lbs/hour from the baghouse exhaust stack. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.5.f.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every three years, thereafter. The source may also be tested at any time if directed by the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.
- (c) Methods.
- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) 40 CFR 60, Appendix A, Method 7, 7A, 7B, 7C, 7D, or 7E shall be used to determine the pollutant emission rate.
- (3) 40 CFR 60, Appendix A, Method 2 shall be used to determine the volumetric flow rate.
- (d) Calculations. To determine mass emission rates (lb/hr, etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.

(e) Production Rate During Testing. The production rate during all compliance testing shall be no less than 90% of the maximum production achieved in the previous three (3) years.

# II.B.5.f.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.5.f.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.6 Conditions on Lime Kilns #1 through #4 ( K-1-4)

#### II.B.6.a **Condition:**

The permittee shall use only coal as a primary fuel in the kilns. Propane or #2 fuel oil may be used as a startup fuel in the kilns. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.6.a.1 **Monitoring:**

Records required for this permit condition will serve as monitoring.

# II.B.6.a.2 **Recordkeeping:**

Use of fuel which has not been approved for use shall be recorded in a log. The log shall include the date, time, type and quantity of non-approved fuel used.

#### II.B.6.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.6.b **Condition:**

Production of lime shall be no greater than 3,306 tons per day and no greater than 1,005,250 tons per rolling 12-month period. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.6.b.1 **Monitoring:**

Production shall be determined using an operations log. Production shall be monitored on a daily basis. Annual production shall be determined within the first 25 calendar days of each month, for the previous month, using the daily operations logs or records. The total shall then be added to the previous 11 months total for a 12 month rolling total. Any adjustments to the total shall be fully explained and justified.

#### II.B.6.b.2 **Recordkeeping:**

Records of production shall be kept for all periods of operation. Records shall be kept on a daily basis for determination of daily limit and monthly rates for determination of annual rolling totals. Records shall be kept in accordance with Provision I.S.1 of this permit

# II.B.6.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.7 Conditions on Observation Point A: NSPS Subpart OOO Baghouses (A:NSPS-OOO)

#### II.B.7.a **Condition:**

Visible emissions shall be no greater than 7 percent opacity. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

### II.B.7.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

#### II.B.7.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.7.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.7.b **Condition:**

Emissions of TSP shall be no greater than 0.022 grain/dscf. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

#### II.B.7.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every five years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of

the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.
- (d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated.

# II.B.7.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.7.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.8 Conditions on Observation Point A: Non-Subpart OOO Baghouses (A: NON-NSPS-OOO)

#### II.B.8.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.8.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in

accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.8.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.8.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

# II.B.9 Conditions on Observation Point A: Limestone Screens (A: SCREENS)

#### II.B.9.a **Condition:**

Visible emission shall be no greater than 10 percent opacity. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

#### II.B.9.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

## II.B.9.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.9.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.9.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.9.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

# II.B.9.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

### II.B.9.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.10 Conditions on Observation Point A: Silo & Storage Bin Vents (A: BINS)

#### II.B.10.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.10.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

## II.B.10.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.10.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.11 Conditions on Observation Point A: Conveyor Transfer Points (A: TRANSFER POINTS)

#### II.B.11.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 Subpart OOO; condition originated in DAQE-140-02]

## II.B.11.a.1 Monitoring:

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

#### II.B.11.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.11.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.11.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not

be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.11.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

## II.B.11.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

# II.B.11.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.12 Conditions on Observation Point A: Drop Points (A: DROP POINTS)

#### II.B.12.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.12.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.12.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.12.a.3 Reporting:

#### II.B.12.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.12.b.1 Monitoring:

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

## II.B.12.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

# II.B.12.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.13 Conditions on Direct Fire Heating System (LS-GRIND)

#### II.B.13.a **Condition:**

All used oil burned as fuel shall meet the following:

not more than 5 ppm by weight - Arsenic not more than 2 ppm by weight - Cadmium not more than 10 ppm by weight - Chromium not more than 100 ppm by weight - Lead not more than 1,000 ppm by weight - Total Halogens not more than 0.50 percent by weight - Sulfur

Flash point shall not be less than 100 degrees Fahrenheit. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.13.a.1 **Monitoring:**

Certification shall be either by permittee testing or test reports provided by the used oil fuel vendor. The used oil fuel shall be tested for halogen content by ASTM Method D-808-81, EPA Method 8240 or Method 8260 before used oil fuel is transferred to a holding tank or burned.

## II.B.13.a.2 **Recordkeeping:**

The permittee shall maintain records that document results of EPA test methods. All records shall be documented and maintained consistent with the requirements of Provision S.1 in Section I of this permit.

#### II.B.13.a.3 Reporting:

#### II.B.13.b **Condition:**

The permittee may use propane, diesel and used oil in any combination in the direct fire heating system for the limestone grinding plant. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.13.b.1 Monitoring:

Records required for this permit condition will serve as monitoring.

# II.B.13.b.2 **Recordkeeping:**

Use of fuel which has not been approved for use shall be recorded in a log. The log shall include the date, time, type and quantity of non-approved fuel used.

# II.B.13.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

# II.B.14 Conditions on Observation Point B: Conveyor Transfer Points (B: TRANSFER POINTS)

#### II.B.14.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 Subpart OOO; condition originated in DAQE-140-02]

### II.B.14.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

## II.B.14.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.14.a.3 **Reporting:**

#### II.B.14.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

### II.B.14.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

## II.B.14.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

# II.B.14.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.15 Conditions on Observation Point B: Drop Points (B: DROP POINTS)

#### II.B.15.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.15.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A. B. C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

#### II.B.15.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.15.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.15.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.15.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

# II.B.15.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

### II.B.15.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.16 Conditions on Observation Point C: NSPS Subpart OOO Baghouses (C: NSPS-OOO)

#### II.B.16.a **Condition:**

Visible emissions shall be no greater than 7 percent opacity. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

## II.B.16.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.16.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.16.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.16.b **Condition:**

Emissions of TSP shall be no greater than 0.022 grain/dscf. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

### II.B.16.b.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of issuance of this permit and once every five years, thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.
- (d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated.

# II.B.16.b.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

### II.B.16.b.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

### II.B.17 Conditions on Observation Point C: Non-Subpart OOO Baghouses (C: NON-NSPS-OOO)

#### II.B.17.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.17.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.17.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.17.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.18 Conditions on Observation Point C: Silo & Storage Bin Vents (C: BINS)

#### II.B.18.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.18.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A. B. C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.18.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.18.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.19 Conditions on Observation Point C: Conveyor Transfer Points (C: TRANSFER POINTS)

#### II.B.19.a **Condition:**

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 Subpart OOO; condition originated in DAQE-140-02]

#### II.B.19.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less

visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.19.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

### II.B.19.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.19.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.19.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

## II.B.19.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

#### II.B.19.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.20 Conditions on Observation Point C: Drop Points (C: DROP POINTS)

#### II.B.20.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.20.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit

exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.20.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.20.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.20.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.20.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

#### II.B.20.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

#### II.B.20.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.21 Conditions on Observation Point D: NSPS Subpart OOO Baghouses (D: NSPS-OOO)

#### II.B.21.a **Condition:**

Emissions of TSP shall be no greater than 0.022 grain/dscf. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

## II.B.21.a.1 **Monitoring:**

Stack testing shall be performed as specified below:

- (a) Frequency. Emissions shall be tested within one year of the issuance of this permit and once every three years thereafter. Tests may also be required at the direction of the Executive Secretary.
- (b) Notification. At least 30 days before the test, the source shall notify the Executive Secretary of the date, time, and place of testing and provide a copy of the test protocol. The source shall attend a pretest conference if determined necessary by the Executive Secretary.

#### (c) Methods.

- (1) Sample Location the emission point shall conform to the requirements of 40 CFR 60, Appendix A, Method 1, and Mine Safety and Health Administration (MSHA) approved access shall be provided to the test location.
- (2) Sample Method 40 CFR 60. Appendix A, Method 5 or Method 17 shall be used to determine the particulate matter concentration. The minimum sample volume shall be 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 deg. C (250 deg F), to prevent water condensation on the filter.
- (d) Calculations. To determine mass emission rates (lb./hr., etc.) the pollutant concentration as determined by the appropriate methods above shall be multiplied by the volumetric flow rate and any necessary conversion factors determined by the Executive Secretary to give the results in the specified units of the emission limitation.
- (e) Production Rate During Testing. All tests shall be conducted while the source is operating at the maximum production or combustion rate at which such source will be operated.

#### II.B.21.a.2 **Recordkeeping:**

Results of all stack testing shall be recorded and maintained in accordance with the associated test method and Provision S.1 in Section I of this permit.

# II.B.21.a.3 **Reporting:**

The results of stack testing shall be submitted to the Executive Secretary within 60 days of completion of the testing. Reports shall clearly identify results as compared to permit limits and indicate compliance status. There are no additional reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.21.b Condition:

Visible emissions shall be no greater than 7 percent opacity. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

#### II.B.21.b.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly.

Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.21.b.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.21.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.22 Conditions on Observation Point D: Limestone Screens (D: SCREENS)

#### II.B.22.a Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.22.a.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

#### II.B.22.a.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

#### II.B.22.a.3 **Reporting:**

#### II.B.22.b Condition:

Visible emission shall be no greater than 10 percent opacity. [Authority granted under 40 CFR 60 (Subpart OOO); condition originated in DAQE-140-02]

# II.B.22.b.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.22.b.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.22.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.23 Conditions on Observation Point D: Conveyor Transfer Points (D: TRANSFER POINTS)

#### II.B.23.a Condition:

Visible emissions shall be no greater than 10 percent opacity. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60 Subpart OOO; condition originated in DAQE-140-02]

#### II.B.23.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of

this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.23.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.23.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.23.b **Condition:**

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.23.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

#### II.B.23.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

#### II.B.23.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

# II.B.24 <u>Conditions on Observation Point D: Limestone Crushers ( D: CRUSHERS)</u>

#### II.B.24.a Condition:

Visible emissions shall be no greater than 15 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.24.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in

accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

# II.B.24.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.24.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.24.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

#### II.B.24.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

#### II.B.24.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

### II.B.24.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

### II.B.25 Conditions on Observation Point D: Drop Points (D: DROP POINTS)

### II.B.25.a **Condition:**

Visible emissions shall be no greater than 20 percent opacity. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.25.a.1 **Monitoring:**

A certified observer shall conduct a visible emissions observation, in accordance with 40 CFR 60, Appendix A, Method 9, of affected emission units monthly. Alternately, to satisfy this requirement, the permittee may survey a group of affected units visible from a pre-determined observation location (A, B, C or D) monthly. A certified observer shall determine the unit with the highest observed opacity. A Visual Emissions Observation (VEO) shall be conducted, in accordance with Method 9, on that unit. If this unit does not exceed its opacity limitation, no further observation is required for any other affected emission units, surveyed for this location, with an equal or higher opacity limit. If the unit exceeds its opacity limitation, a visual observation shall be conducted on the unit that appears to have the next highest opacity, and so on, until an emission unit of this group does not exceed the opacity limitation. Once an emission unit has been determined to comply with this condition, units with the same or higher opacity limit, that were surveyed from the same location and appear to have less visible emissions, shall be considered to be in compliance with their opacity limitation.

### II.B.25.a.2 **Recordkeeping:**

The permittee shall record the location of each visual opacity observation and keep a list of the emission units checked during the observation. The records required by this provision and all data required by 40 CFR 60, Appendix A, Method 9 shall be maintained in accordance with Provision I.S.1 of this permit.

# II.B.25.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.25.b Condition:

Water sprays or chemical dust suppression sprays shall be installed at the following limestone handling points, if otherwise uncontrolled, to control fugitive emissions: crushers, screens (emissions not controlled by a baghouse), conveyor transfer points. The sprays shall operate whenever dry conditions warrant or as determined necessary by the Executive Secretary such that the opacity limitations are not exceeded. Sprays shall not be required during periods of freezing conditions. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.25.b.1 **Monitoring:**

Visual inspections of the water spray system(s) shall be made weekly to ensure proper operating condition.

#### II.B.25.b.2 **Recordkeeping:**

An operators log shall be maintained of all monitoring provisions listed above. The records shall contain all applicable information as required by section I.S.1 of this permit.

#### II.B.25.b.3 **Reporting:**

## II.B.26 Conditions on Abrasive Blasting (AB)

#### II.B.26.a **Condition:**

Visible emissions shall not exceed 40 percent opacity for more than three minutes in any one hour if the permittee is complying with one of the performance standards listed below.

- (a) Any abrasive blasting operation may use at least one of the following performance standards:
  - (1) Confined blasting;
  - (2) Wet abrasive blasting;
  - (3) Hydroblasting; or
  - (4) Unconfined blasting using abrasives as defined in paragraph (b).
- (b) Abrasives used for dry unconfined blasting referenced in paragraph (a)(4) above shall comply with the following performance standards:
- (1) Before blasting the abrasive shall not contain more than 1% by weight material passing a #70 U.S. Standard sieve.
- (2) After blasting the abrasive shall not contain more than 1.8% by weight material 5 micron or smaller.
- (3) Abrasives reused for dry unconfined blasting are exempt from paragraph (b)(2), but must conform with paragraph (b)(1).
- (c) Sources using the performance standard of paragraph (a)(4) must demonstrate that the abrasives were obtained from persons that have certified (submitted test results) to the executive secretary at least annually that such abrasives meet the requirements of paragraph (b) above (ref. R307-206.). [Authority granted under R307-206; condition originated in R307-206]

#### II.B.26.a.1

#### **Monitoring:**

Visible emission evaluation of abrasive blasting operations shall be conducted at least semi-annually in accordance with the following provisions:

- (a) EPA proposed method 203B shall be used for all observations;
- (b) Evaluations shall be conducted by a person certified in accordance with 40 CFR 60, Appendix A, Method 9;
- (c) Observations shall be conducted for a period of no less than three minutes but no more than one hour, in accordance with the applicable time period for this provision;
- (d) Emissions from unconfined blasting shall be read at the densest point of the emission after a major portion of the spent abrasive has fallen out, at a point not less than five feet nor more than twenty-five feet from the impact surface from any single abrasive blasting nozzle;
- (e) Emissions from unconfined blasting employing multiple nozzles shall be judged as a single source unless it can be demonstrated by the owner or operator

that each nozzle, evaluated separately, meets the emission and performance standards of this provision;

(f) Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure.

### II.B.26.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

#### II.B.26.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.27 Conditions on NSPS Fuel Storage Tanks (NSPS-Tanks)

#### II.B.27.a **Condition:**

The permittee shall keep readily accessible records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be kept for the life of the source. [Authority granted under 40 CFR 60.112b(b); condition originated in 40 CFR 60, Subpart Kb]

## II.B.27.a.1 **Monitoring:**

The required records shall be reviewed to determine compliance with this condition.

# II.B.27.a.2 **Recordkeeping:**

Results of monitoring shall be maintained in accordance with Provision I.S.1 of this permit.

## II.B.27.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

## II.B.28 Conditions on Haul Roads (HR)

## II.B.28.a **Condition:**

Fugitive dust shall be minimized. All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. Other than the exception below, treatment shall be of sufficient frequency and quantity to maintain surface material in a damp/moist condition, such that the opacity shall be minimized. Water need not be applied if weather conditions would create a dangerous driving condition (i.e. below freezing).

Chemical treatment shall be applied to the haul roads from plant to quarry and plant to paved highway no less than two (2) times per year. More frequent applications shall be applied if permittee is unable to minimize dust. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

## II.B.28.a.1 **Monitoring:**

Records of water or chemical dust suppressant applications shall serve as monitoring.

# II.B.28.a.2 **Recordkeeping:**

Records of water and/or chemical treatment shall be kept for all periods. The records shall contain at a minimum: the date and time of applications, number of treatments made, dilution ratio, quantity applied, any rainfall received and approximate amount.

## II.B.28.a.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.B.28.b Condition:

The permittee shall limit the speeds on haulage roads as follows:

Twenty-five (25) mph within the plant and in the vicinity of the crusher in the quarry area.

Fourty (40) mph within 1.5 miles of either the plant or the quarry on the quarry road. Fifty (50) mph outside the 1.5 mile distance point of the plant or quarry on the quarry road

Fourty (40) mph between the plant and the paved highway. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-140-02]

# II.B.28.b.1 **Monitoring:**

Speed limit signs shall be posted at the entrance to the active haul road area. Speed of the vehicles noted above shall be observed at a minimum once each year. Additionally, at least once each year, all speed limit signs shall be inspected to assure they are still present.

## II.B.28.b.2 **Recordkeeping:**

Observations of the equipment speed and results of annual inspections of the speed limit signs shall be recorded in a log and maintained as described in Provision S.1 in Section I of this permit.

#### II.B.28.b.3 **Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

#### II.C. Emissions Trading.

(R307-415-6a(10))

Not applicable to this source.

#### **II.D.** Alternative Operating Scenarios.

(R307-415-6a(9))

Not applicable to this source.

# **Section III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

# **Section IV: ACID RAIN PROVISIONS.**

This source is not subject to Title IV. This section is not applicable.

## **REVIEWER COMMENTS**

This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-140-02

dated February 27, 2002

# 1. Comment on an item originating in DAQE-140-02 regarding Observation Point A: Drop Points (Unit A: DROP POINTS)

Radial Stacker Drop Distance: DAQE-140-02 Condition 18 requires the drop distance between radial stackers and stockpiles to be minimized. Radial stackers are subject to a 20% opacity limitation and reduction of drop distance is a standard work practice. Therefore, this condition has not been included in the Operating Permit. [Comment last updated on 6/18/2002]

# 2. Comment on an item originating in DAQE-140-02 regarding Observation Point B: Drop Points (Unit B: DROP POINTS)

Radial Stacker Drop Distance: DAQE-140-02 Condition 18 requires the drop distance between radial stackers and stockpiles to be minimized. Radial stackers are subject to a 20% opacity limitation and reduction of drop distance is a standard work practice. Therefore, this condition has not been included in the Operating Permit. [Comment last updated on 6/18/2002]

# 3. Comment on an item originating in DAQE-140-02 regarding Observation Point C: Drop Points (Unit C: DROP POINTS)

Radial Stacker Drop Distance: DAQE-140-02 Condition 18 requires the drop distance between radial stackers and stockpiles to be minimized. Radial stackers are subject to a 20% opacity limitation and reduction of drop distance is a standard work practice. Therefore, this condition has not been included in the Operating Permit. [Comment last updated on 6/18/2002]

# 4. Comment on an item originating in DAQE-140-02 regarding Observation Point D: Drop Points (Unit D: DROP POINTS)

Radial Stacker Drop Distance: DAQE-140-02 Condition 18 requires the drop distance between radial stackers and stockpiles to be minimized. Radial stackers are subject to a 20% opacity limitation and reduction of drop distance is a standard work practice. Therefore, this condition has not been included in the Operating Permit. [Comment last updated on 6/18/2002]

# 5. Comment on an item originating in 40 CFR 60.670, Subpart OOO regarding Observation Point C: NSPS Subpart OOO Baghouses (Unit C: NSPS-OOO)

TSP Test Frequency of Subpart OOO Baghouses: A TSP test frequency of five (5) years has been specified for this Subpart OOO baghouse due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from previous tests are as follows:

# 6. Comment on an item originating in 40 CFR 60.110b, Subpart Kb regarding Non-NSPS Fuel Storage Tanks (Unit NONNSPS-TANKS)

Petroleum storage tanks not subject to NSPS Subpart Kb: The four 10,150 gallon diesel tanks and the 2,000 gallon gasoline tank are not subject to NSPS, Subpart Kb due to size (less than 10,566 gal.) [Comment last updated on 4/18/2002]

# 7. Comment on an item originating in 40 CFR 60.670, Subpart OOO regarding Observation Point A: NSPS Subpart OOO Baghouses (Unit A:NSPS-OOO)

TSP Test Frequency of Subpart OOO Baghouses: A TSP test frequency of five (5) years has been specified for these Subpart OOO baghouses due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from previous tests are as follows:

D-7122: 0.002 gm/dscm TSP (4.0%)

D-7133: 0.0007 gm/dscm TSP (1.4%)

D-7141: 0.001 gm dscm TSP (2.0%)

D-310: 0.005 gm/dscm TSP (10%)

D-414: 0.0002 gr/dscf TSP (0.9%)

D-403: 0.0002 gr/dscf TSP (0.9%) [Comment last updated on 8/27/2002]

# 8. Comment on an item originating in DAQE-140-02 regarding permitted source (Sourcewide)

Identification of Observation Points: The observation points listed within this permit shall be defined as:

Observation Point A: Elevator Deck of Calcium Carbonate Plant.

Observation Point B: Access road between #1 and #3 stone piles.

Observation Point C: North side of Office Building.

Observation Point D: Quarry Crusher Operator's Shack. [Comment last updated on

4/18/2002]

# 9. Comment on an item originating in 40 CFR 60.342(a)(1), Subpart HH regarding Lime Kiln #3 (Unit K-3)

Removal of Particulate Matter Standard: The NSPS Subpart HH particulate matter emission limit of 0.60 lb/ton stone feed is subsummed by the TSP emission limit and is therefore, not included in the Title V Permit.

Based upon a conversion factor of limestone/lime of 2.0, the 0.60 pound/ton stone limit becomes less restrictive than the pound/hour TSP emission limits at the following production rates:

Kiln #2: 165 tons lime/day

Kiln #3: 189 tons lime/day

Kiln #4: 343 tons lime/day

The above production figures are based upon the following sample calculation: Kiln #1 = (8.23 lbs TSP/hr) / (0.60 lbs TSP/ ton stone) / (2.0 tons stone/ton lime) x (24 hours/day) = 165 tons lime/day.

These kilns cannot safely operate at these low production rates. [Comment last updated on 10/01/2002]

# 10. Comment on an item originating in 40 CFR 60.342(a)(1), Subpart HH regarding Lime Kiln #4 (Unit K-4)

Removal of Particulate Matter Standard: The NSPS Subpart HH particulate matter emission limit of 0.60 lb/ton stone feed is subsummed by the TSP emission limit and is therefore, not included in the Title V Permit.

Based upon a conversion factor of limestone/lime of 2.0, the 0.60 pound/ton stone limit becomes less restrictive than the pound/hour TSP emission limits at the following production rates:

Kiln #2: 165 tons lime/day Kiln #3: 189 tons lime/day Kiln #4: 343 tons lime/day

The above production figures are based upon the following sample calculation: Kiln #1 = (8.23 lbs TSP/hr) / (0.60 lbs TSP/ ton stone) / (2.0 tons stone/ton lime) x (24 hours/day) = 165 tons lime/day.

These kilns cannot safely operate at these low production rates. [Comment last updated on 10/01/2002]

# 11. Comment on an item originating in 40 CFR 60.342(a)(1), Subpart HH regarding Lime Kiln #2 (Unit K-2)

Removal of Particulate Matter Standard: The NSPS Subpart HH particulate matter emission limit of 0.60 lb/ton stone feed is subsummed by the TSP emission limit and is therefore, not included in the Title V Permit.

Based upon a conversion factor of limestone/lime of 2.0, the 0.60 pound/ton stone limit becomes less restrictive than the pound/hour TSP emission limits at the following production rates:

Kiln #2: 165 tons lime/day Kiln #3: 189 tons lime/day Kiln #4: 343 tons lime/day

The above production figures are based upon the following sample calculation: Kiln #1 = (8.23 lbs TSP/hr) / (0.60 lbs TSP/ ton stone) / (2.0 tons stone/ton lime) x (24 hours/day) = 165 tons lime/day.

These kilns cannot safely operate at these low production rates. [Comment last updated on 10/01/2002]

## 12. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #2 (Unit K-2)

Baghouse bypassing: During kiln startup water vapor, generated as part of the combustion process, condenses until the kiln system temperature is above the dew point. Any condensate is detrimental to the kiln dust handling equipment. Condensate causes the dust to "blind" the filter bags, coats the dust collector hopper walls, and plugs the dust hopper discharge. Condensation would also cause corrosion of the baghouse itself. All of these effects would serve to render the baghouse ineffective at removing dust from the kiln gas stream. Therefore, bypassing of the baghouse is necessary until the kiln gas stream can be maintained at a high enough temperature so that no condensation occurs in the baghouse system. Due to the large quantities of steel, refractory and limestone, a large amount of heat input is required before the system is hot enough to prevent condensation. The State has determined that a 7 hour limit for bypassing of the baghouse is justified for proper operation. [Comment last updated on 9/16/2002]

# 13. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #3 (Unit K-3)

Baghouse bypassing: During kiln startup water vapor, generated as part of the combustion process, condenses until the kiln system temperature is above the dew point. Any condensate is detrimental to the kiln dust handling equipment. Condensate causes the dust to "blind" the filter bags, coats the dust collector hopper walls, and plugs the dust hopper discharge. Condensation would also cause corrosion of the baghouse itself. All of these effects would serve to render the baghouse ineffective at removing dust from the kiln gas stream. Therefore, bypassing of the baghouse is necessary until the kiln gas stream can be maintained at a high enough temperature so that no condensation occurs in the baghouse system. Due to the large quantities of steel, refractory and limestone, a large amount of heat input is required before the system is hot enough to prevent condensation. The State has determined that a 7 hour limit for bypassing of the baghouse is justified for proper operation. [Comment last updated on 9/16/2002]

#### 14. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #4 (Unit K-4)

Baghouse bypassing: During kiln startup water vapor, generated as part of the combustion process, condenses until the kiln system temperature is above the dew point. Any condensate is detrimental to the kiln dust handling equipment. Condensate causes the dust to "blind" the filter bags, coats the dust collector hopper walls, and plugs the dust hopper discharge. Condensation would also cause corrosion of the baghouse itself. All of these effects would serve to render the baghouse ineffective at removing dust from the kiln gas stream. Therefore, bypassing of the baghouse is necessary until the kiln gas stream can be maintained at a high enough temperature so that no condensation occurs in the baghouse system. Due to the large quantities of steel, refractory and limestone, a large amount of heat input is required before the system is hot enough to prevent condensation. The State has determined that a 7 hour limit for bypassing of the baghouse is justified for proper operation. [Comment last updated on 9/16/2002]

#### 15. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #2 (Unit K-2)

TSP Test Frequency of Kiln #2: A TSP test frequency of three (3) years has been specified for this unit due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from the last test are as follows:

Kiln #2: 0.0033 gr/dscf TSP (16.4%) [Comment last updated on 9/16/2002]

## 16. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #3 (Unit K-3)

TSP Test Frequency of Kiln #3: A TSP test frequency of three (3) years has been specified for this unit due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from the last test are as follows:

Kiln #3: 0.007 gr/dscf TSP (35.0%) [Comment last updated on 9/16/2002]

#### 17. Comment on an item originating in DAQE-140-02 regarding Lime Kiln #4 (Unit K-4)

TSP Test Frequency of Kiln #4: A TSP test frequency of three (3) years has been specified for this unit due to a low potential for noncompliance with the particulate standard. The low potential is demonstrated by previous stack test results. Results and percentage of limit from the last test are as follows:

Kiln #4: 0.0038 gr/dscf TSP (19.0%) [Comment last updated on 9/16/2002]